

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A network interface apparatus for connecting a communication terminal to an IP (Internet Protocol) network, comprising:

an input circuit for receiving data to be transferred from the communication terminal;

a transmitter for transferring a packet to the IP network;

an interface circuit for interfacing said transmitter with the IP network, and for determining a delay in transmission between the IP network and said apparatus to produce delay information;

a packetizer circuit for packetizing the received data to be transferred into the packet in accordance with an Internet Facsimile Protocol (IFP);

said transmitter determining which model for facsimile transmission the received data corresponds to, and allotting a header associated with the determined model to the packet; and

a control circuit operative in response to the delay information for controlling said packetizer circuit to adjust a size of the packet on a basis of the delay information.

2. (Original) An apparatus in accordance with claim 1, wherein said control circuit comprises a memory circuit for storing therein packet size data representative of packet sizes, and for developing packet size data associated with the delay information, said packetizer circuit adjusting the size of the packet in response to the packet size data developed from said memory circuit.

3. (Original) An apparatus in accordance with claim 1, further comprising:

a receiver for receiving a packet transmitted over the IP network; and

an output circuit for depacketizing the packet into data and outputting the data to the communication terminal.

4. (Currently Amended) A network interface apparatus for connecting a communication terminal to an IP (Internet Protocol) network, comprising:

an input circuit for receiving data to be transferred from the communication terminal;

a transmitter for transferring the data to the IP network;

an interface circuit for interfacing said transmitter with the IP network, and for determining a delay in transmission between the IP network and said apparatus to produce delay information;

a packetizer circuit for packetizing the received data into a packet in accordance with an Internet Facsimile Protocol (IFP);

said transmitter determining which model for facsimile transmission the received data corresponds to, and allotting a header associated with the determined model to the packet; and

a control circuit interconnected between said input circuit and said transmitter and operative in response to the delay information for controlling said transmitter to adjust a transfer rate of transferring the ~~data~~-packet on a basis of the delay information.

5-6. (Canceled)

7. (Currently Amended) An apparatus in accordance with claim 46, further comprising:

a receiver for receiving a packet transmitted over the IP network; and

an output circuit for depacketizing the packet into data and outputting the data to the communication terminal;

said control circuit being interconnected between said input circuit and said transmitted and controlling said ~~output~~-input circuit to adjust a transfer rate of outputting the data on the basis of the delay information.

8. (Original) A network interface apparatus for connecting a communication terminal to an IP (Internet Protocol) network, comprising:

an input circuit for receiving data to be transferred from the communication terminal;

a transmitter for transferring a packet to the IP network;

an interface circuit for interfacing said transmitter with the IP network;

a packetizer circuit for packetizing the data to be transferred into a packet to develop the packet;

a packet coupler for coupling two or more of the packets with each other; and

said packet coupler inhibiting said packetizer circuit from developing the packet when said packet coupler includes more packets than a first predetermined amount.

9. (Original) An apparatus in accordance with claim 8, further comprising a control circuit for controlling said packet coupler to couple more packets when said packetizer circuit includes more data to be packetized.

10. (Original) An apparatus in accordance with claim 8, wherein said interface circuit determines

a delay in transmission between the IP network and said apparatus to produce delay information;

said apparatus further comprising a control circuit operative in response to the delay information for controlling said packetizer circuit to adjust a size of the packet on a basis of the delay information.

11. (Original) An apparatus in accordance with claim 8, wherein said packet coupler comprises:

a memory circuit for storing the coupled packets therein; and

a memory control circuit operative in response to said packetizing circuit and said memory circuit for controlling writing and reading of said memory circuit on a basis of whether or not said packetizer circuit includes more data to be packetized than the first predetermined amount and of whether or not said memory circuit includes more packets than a second predetermined amount.

12. (Original) An apparatus in accordance with claim 10, further comprising:

a receiver for receiving a packet transmitted over the IP network; and

an output circuit for depacketizing the packet into data and outputting the data to the communication terminal; and

said control circuit controlling said output circuit to adjust a transfer rate of outputting the data on the basis of the delay information.

13-14. (Canceled)

15. (Original) A communication apparatus for transferring data to an IP (Internet Protocol) network, comprising:

an input circuit for capturing an image of a document and forming data to be transferred representing the image;

a transmitter for transferring a packet to the IP network;

an interface circuit for interfacing said transmitter with the IP network;

a packetizer circuit for packetizing the data to be transferred into a packet to develop the packet;

a packet coupler for coupling two or more of the packets with each other; and

said packet coupler inhibiting said packetizer circuit from developing the packet when said packet coupler includes more packets than a first predetermined amount.

16. (Currently Amended) A method of interfacing a communication terminal with an IP (Internet Protocol) network, comprising the steps of:

receiving data to be transferred from the communication terminal;

determining a delay in transmission over the IP network;

packetizing the received data to be transferred into a packet in accordance with an Internet Facsimile Protocol (IFP);

adjusting a size of the packet on a basis of the delay determined; and

determining, when the received data are facsimile data, which model the received data corresponds to of, allotting a header associated with the determined model to the packet, and
transferring the packet having the size adjusted to the IP network.

17. (Currently Amended) A method of interfacing a communication terminal with an IP (Internet Protocol) network, comprising the steps of:

receiving data to be transferred from a communication terminal;

determining a delay in transmission over the IP network;

adjusting a transfer rate of transferring the data on a basis of the delay determined; and

determining, when the received data are facsimile data, which model the received data corresponds to, allotting a header associated with the determined model to the packet, and transferring the data to the IP network.

18. (Original) A method of interfacing a communication terminal with an IP (Internet Protocol) network, comprising the steps of:

receiving data to be transferred from the communication terminal;
packetizing the data to be transferred into a packet by a packetizer circuit;
coupling two or more of the packets with each other by a packet coupler;
transferring the packet to the IP network; and
inhibiting the packetizer circuit from developing the packet when the packet coupler includes more packets than a predetermined amount.

19. (Currently Amended) A storage medium for storing therein a procedure of interfacing a communication terminal with an IP (Internet Protocol) network, comprising the steps of:

receiving data to be transferred from the communication terminal;
determining a delay in transmission over the IP network;
packetizing the received data to be transferred into a packet in accordance with an Internet Facsimile Protocol (IFP);
adjusting a size of the packet on a basis of the delay determined; and
determining, when the received data are facsimile data, which model the received data corresponds to, allotting a header associated with the determined model to the packet, and transferring the packet having the size adjusted to the IP network.

20. (Currently amended) A storage medium for storing therein a procedure of interfacing a communication terminal with an IP (Internet Protocol) network, comprising the steps of:

receiving data to be transferred from a communication terminal;
determining a delay in transmission over the IP network;
adjusting a transfer rate of transferring the data on a basis of the delay determined; and

determining, when the received data are facsimile data, which model the received data corresponds to, allotting a header associated with the determined model to the packet, and transferring the data to the IP network.

21. (Original) A storage medium for storing therein a procedure of interfacing a communication terminal with an IP (Internet Protocol) network, comprising the steps of:

receiving data to be transferred from the communication terminal;
packetizing the data to be transferred into a packet by a packetizer circuit;
coupling two or more of the packets with each other by a packet coupler;
transferring the packet to the IP network; and

inhibiting the packetizer circuit from developing the packet when the packet coupler includes more packets than a predetermined amount.

22. (New) A method of interconnecting a communication terminal to an Internet Protocol (IP) network, comprising the steps of:

receiving a packet transmitted over the IP network;
determining a delay in transmission over the IP network;
determining which model of a plurality of models the received packet corresponds to, and
depacketizing the received packet into data;
adjusting a size of the data on a basis of the delay determined; and
transferring the data having the size adjusted to the communication terminal.

23. (New) A method of interconnecting a communication terminal to an Internet Protocol (IP) network, comprising the steps of:

receiving a packet transmitted over the IP network;
determining a delay in transmission over the IP network;
determining which model of a plurality of models the received packet corresponds to, and
depacketizing the received packet into data;
adjusting a transfer rate of the data on a basis of the delay determined; and

transferring the data having the transfer rate adjusted to the communication terminal.